Foundation and site exploration Testing of soils, concrete and bituminous materials Groundwater monitoring and hydrogeologic studies

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## TESTING SERVICE CORPORATION

457 East Gundersen Drive, Carol Stream, Illinois 60188

January 20, 1984

FOREST PRESERVE DISTRICT OF DUPAGE COUNTY P. O. Box 2330 Glen Ellyn, Illinois 60137

Mr. Scott Gerrick, Attention:

Environmental Testing Coordinator

L-20,183 Re:

BLACKWELL FOREST PRESERVE DuPage County, Illinois

Dear Scott:

During December 13, 14, 15 and 16, 1983, purging and sampling work was performed for monitoring wells, gas vents and lakes for the above referenced site. Other work included making measurements of water levels and well depths, taking water temperatures and checking for the presence of methane gas.

Details and procedures for the field work are summarized below:

- Purging was performed for the 29 monitoring wells but not for the 4 gas vents. Purging was accomplished by either a submersible pump powered by a portable generator or by bailing. Bailing was performed for wells containing small volumes of water. A minimum of 1 volume of water was evacuated from the well casings. The purging equipment was rinsed with clean water prior to each use. Purging work was performed during the first two days of field work.
- 2. Water samples were obtained from the monitoring wells with the individual suspended bailers. The samples were taken from the second bail of Two sample containers (a vial for water. priority pollutant volatiles and a 500 ml. plastic container for selected inorganic parameters) were obtained for each monitoring well and gas vent.

Site Name

Dr. Lawrence A. DuBose

1LD 980606305

OuPage County Landfill Blackwell Forest Preserve

£1.75

Charles C Luther Executive Vice-President

Lyle E. Thompson Vice-President

Noble D. Moran Vice-President

**Bruce Poynor** Engineering Geologist

EPA Region 5 Records Ctr.

248009

Silver Lake, the swim lake and the supply lake were sampled at a total of six locations. One vial sample was taken for each location with a 500 ml. plastic container taken at two of the six locations. The sampling for the monitoring wells and the lakes was accomplished in one day (3rd day of field work). The liquid samples obtained from the gas vents were obtained separately on the 4th day of field work.

- 3. The samples were coded and a Chain of Custody Record was prepared. The samples were preserved by refrigeration and delivered on the day they were obtained to Aqualab, Inc. for testing. The samples requiring filtering were filtered by Aqualab, Inc. The Chain of Custody Record given to Aqualab, Inc. did not reveal the identity of the samples.
- 4. Several "splits" and a field blank were taken and submitted with the samples for quality assurance purposes.
- 5. Other field work included the following:
  - a. Water level measurements were made using a battery operated water level detector for all monitoring wells both prior to purging and prior to sampling. Liquid levels were also measured for the vents.
  - b. Measurements were also made to the bottom of the wells and vents.
  - c. Temperatures of the samples collected were also recorded.
  - d. Checking for the presence of methane gas for the monitoring wells was made with a gas detector supplied by the Forest Preserve District.

The results of our field work are summarized in the enclosed table.

-3-

JANUARY 20, 1984 L-20,183

During field purging work it was noted that the water evacuated for several of the monitoring wells at the base of the hill on the southwest side had a black or darkish color and a slight odor was detected. The clarity of the water improved notably during purging.

The laboratory test results obtained for the samples by Aqualab, Inc. are shown on the enclosed Analytical Reports. The identity of the sample numbers can be determined by the enclosed Chain of Custody Record.

It is a pleasure to assist you with this project. Please call if there are any questions.

Respectfully submitted,

TESTING SERVICE CORPORATION

Prepared by:

Bruce Poynor,

Engineering Geologist

LAD:BP:ceq

Enclosures:

Summary Sheets

A. DuBose, President

Chain of Custody Report

Aqualab, Inc. Analytical Reports

	<u> </u>	<del></del>	DEPT	HS* & ELE			
	•				TO WATER	1	METHANE
	DAT	E-1983	TO BOT.	I .	PRIOR TO	WATER	GAS
LOCATION	PURGED	SAMPLED	OF CASING	,	SAMPLING	TEMP F	J
G100	12-13	12-15	18'1/2"	13.68	13.45	48	ND
1	В			707.80	708.03		
G101	12-13	12-15	13'	5.20	4.95	48	ND
	В		2-1/2"	708.76	709.01		
G102	12-13	12-15	26'	18.01	17.91	48	ND
G103S	B 12-13	12-15	10-1/2"	709.56 8.51	709.66 8.40	50	ND
61032	P 12-13	12-15	40.0	709.29	709.40	30	ND
G103D	12-13	12-15	64'	20.22	19.98	50	ND
	P		4-1/2"	697.78	698.02		
G104	12-13	12-15	22'	20.01	19.86	49.	SLIGHT
63.05	B	12.15	2-1/2"	711.22	711.37	F.0	
G105	12-13 B	12-15	24'3"	20.27 704.01	20.12 704.16	50	ALARM
G106	12-13	12-15	14'7"	12.97	12.58	50	ALARM
	В			703.25	703.64		
G107S	12-13	12-15	40'	14.90	14.78	48	ND
	P		8-1/2"	693.19	693.31		
G107D	12-13	12-15	49'0"	15.81	15.69	48	ND
G108	P 12-14	12-15	14'10"	691.81 7.73	691.93 7.64	51	110
6108	P .	12-15	14 10	692.08	692.17	21	ND
G109	12-13	12-15	21'11"	13.93	13.80	49	ND
	P			692.10	692.23		
G110	12-13	12-15	17'7"	15.15	15.00	50	ALARM
Cll	B 12-13	12-15	23'4"	692.43	692.58	50	252216
G111	12-13 P	12-15	23.4"	16.28 692.82	16.17 692.93	<b>5</b> 0	ALARM
G112	12-13	12-15	21'	15.30	15.18	50	ND
	P		3-1/2"	692.88	693.00		
G113	12-13	12-15	21'8"	15.13	14.99	50	ALARM
	P			693.01	693.15		
G114	12-13	12-15	30'7"	16.43	16.30	50	MEDIUM
G115S	P 12-14	12-15	21'	693.17	693.30 15.07	50	ND
	P		6-1/2"	693.36	693.53	J0	No
G115D	12-14	12-15	50'5"	15.04	14.96	48	ND
	Р	. i		691.71	691.79		
G116	12-14	12-15	47'3"	16.04	15.93	51	ND
G117	P 12 14	12-15	30'1"	691.69	691.80	- 53	
GII/	12-14 P	12-13	20.1.	14.55 692.58	14.47 692.66	53	ND
G118S	12-13	12-15	22`	17.10	16.89	49	NOT
	В		8-3/4"	693.28	693.49		CHECKED
G118D	12-13	12-15	56'11"	18.73	18.60	45	NOT
	P			691.00	691.13		CHECKED
G119	12-13	12-15	20'1/2"	14.35	14.24	52	NOT
	B			706.15	706.26	i	CHECKED

r							<del>,                                     </del>
			DEPT	HS* & ELE	ļ	1	
1	}			TO WATER		1	METHANE
1	l DAT	E-1983	TO BOT.	PRIOR TO	PRIOR TO	WATER	GAS
LOCATION		SAMPLED			SAMPLING	TEMP F	SIGNAL
1205	12-13	12-15	60'	33.04	32.86	45	ND
	P	1 – !	4-1/2"	697.89	698.07		
G120D	12-13	12-15	84'2"	37.74	37.55	47	ND
	P			693.10	693.29		
G121	12-14 P	12-15	21'	11.48 692.33	11.40	52	ND
G122	12-14 P	12-15	.25 8"	14.47 692.14	14.30 692.31	53	ND
G123	12-14	12-15	22'2"	14.70	14.57	54	ND
	P	•		693.21	693.34		
SV5		12-16	30'6"	<del></del>	21.20		
		12-10			709.27		
DV5		12-16	29'6"		21.65 701.78	42	
SV10		12-16	65'8"		62.19 693.03	42	
LARGE 8" VENT AT TOP OF MT. HOY		12-16				86	
DV1		SEE	NOTES	BELO	) W		

\* - Depths referenced to top of steel protective pipe with hinged lid up. Depths to water are in feet.

P - Indicates well purged with pump

B - Indicates well purged with bailer

ND - Not Detected

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DV1 - We were unable to obtain a liquid sample at this location due to a restriction in the casing and we were also unsuccessful in obtaining a reliable liquid level measurement. The nearby large 8" diameter vent was sampled as a substitute.

## TESTING SERVICE CORPORATION 457 EAST GUNDERSEN DRIVE .CAROL STREAM, ILLINOIS 60188

	CHAIN (			DY				
CLIENT: FOREST PRESERVE DISTRICT of DU PAGE COUNTY			PROJ: SAMPLER(S): BLACKWELL Bai			ler		
SPL. NO.	SPL. LOCATION	DATE 1983	- TIME	WA	PL. TYP		NOTES	
90	G 118 S	Dec.	15 8:30		x	2		
91	G 118 D	Dec.	15 8:40		x	2		
92	G 118 S QA split	Dec.	15 -		x	2		
93	G 119	Dec.	15 8:55	<u> </u>	x	2		
94	G 120 S	Dec.	15 9:10		x	2		
95	G 120 D	Dec.	15 9:20		x	2		
96	G 100	Dec.	15 9:30		x	2		
97	G 101	Dec.	15 9:45	<u> </u>	x	2		
98	G 102	Dec.	15 10:05		x	2		
99	G 103 S	Dec.	15 10:15		x	2		
100	G 103 D	Dec.	15 10:20		×	2		
101	G 104	Dec.	15 10:30		x	2		
102	G 105	Déc.	15 10:45	<u> </u>	×	2		
RELINQUISHED BY			RECEIVED BY				DATE - TIME	
* Via	al + 500 ml.							
·				<del></del>				
dispatched by: via:			ate:	receive	g py:		date:	

TESTING SERVICE CORPORATION
457 EAST GUNDERSEN DRIVE
CAROL STREAM, ILLINOIS 60188

CLIENT:	FOREST PRESERVE DISTRIC		3	AMPLER (		
SPL.	of DU PAGE COUNTY	BLACKWE	SPL	TYPE	Baile NO.	
NO.	SPL. LOCATION	DATE - TIME 1983		rab	OF* BTLS.	NOTES
103	G 106	Dec. 15 11:00		x	2	
104	G 107 S	Dec. 15 11:15		x	2	
105	G 107 D	Dec. 15 11:20		х	2	
106	G 109	Dec. 15 11:30		x	2	·····
107	G 110	Dec. 15 11:40		×	2	
108	G 111	Dec. 15 11:50		×	2	
109	G 112	Dec. 15 12:00		x	2	
110	G 113	Dec. 15 12:10		x	2	
111	G 112 QA split	Dec. 15		×	2	
112	G 114	Dec. 15 12:20		x	2	
113	G 123	Dec. 15 12:45		x	2	
114	G 115 S	Dec. 15 1:00		•	2	<del></del>
115	G 115 D	Dec. 15 1:15		x	2	
RELINQUISHED BY		RE	RECEIVED BY		DATE - TIME	
* Vial	+ 500 ml.					

## TESTING SERVICE CORPORATION 457 EAST GUNDERSEN DRIVE CAROL STREAM, ILLINOIS 60188

	CHAIN		STC	DY			
CLIENT:	FOREST PRESERVE DISTRI	CT PROJ:	LACKWEI	LI	SAMPL	ER(S):	ailer
SPL. NO.	SPL. LOCATION	DATE -	TIME			E NO. OF, BTLS	NOTES
129	\$V 5	Dec. 16	1:15		x	2	
130	Lg gas vent at top of h	illDec. 16	1:45		х	2	
131	DV 5	Dec. 16	2:15		x	2	
132	SV 10	Dec. 16	2:30		x	2	
			<u> </u>	<u> </u>			
<u> </u>							
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		<del>-   .</del>					
	RELINQUISHED BY		RE	CEIVED	BY		DATE - TIM
* Vi	al + 500 ml.						
				<u>.                                      </u>			
dispatci	ned by:	.a: Jat	ε:  :	receive	ed by:		date: